



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

|  |              |                      |                     |                  |
|--|--------------|----------------------|---------------------|------------------|
| APPLICATION NO.  | FILING DATE  | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/565,920   | 09/15/2006   | Carsten Detlefs      | 056982/00062        | 7628             |
| 31013  | 7590         | 11/23/2009           | EXAMINER            |                  |
| KRAMER LEVIN NAFTALIS & FRANKEL LLP<br>INTELLECTUAL PROPERTY DEPARTMENT<br>1177 AVENUE OF THE AMERICAS<br>NEW YORK, NY 10036 |              |                      | BURCH, MELODY M     |                  |
| ART UNIT   | PAPER NUMBER | 3657                 |                     |                  |
| NOTIFICATION DATE  |              | DELIVERY MODE        |                     |                  |
| 11/23/2009   |              | ELECTRONIC           |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

[klpatent@kramerlevin.com](mailto:klpatent@kramerlevin.com)

|                              |                                      |                                       |
|------------------------------|--------------------------------------|---------------------------------------|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/565,920 | <b>Applicant(s)</b><br>DETLEFS ET AL. |
|                              | <b>Examiner</b><br>Melody M. Burch   | <b>Art Unit</b><br>3657               |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 03 August 2009.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-13 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-13 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_

5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 3, 4, 11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6276761 to Beck in view of US Patent 3432210 to Crouch.

Re: claims 1, 3, 4 and 13. Beck shows in the figure an electronic compressed air system for a vehicle comprising a compressed air supply part shown on the left side of the figure and a compressed air consumer part shown on the right side of the figure, the compressed air supply part including a compressor 11, the compressed air consumer part including a plurality of service-brake circuits 2.1, 2.2 having compressed air load circuits and compressed air reservoirs as disclosed in col. 4 lines 45-47, a high pressure compressed air load circuit 30, and electrically actuatable valves 21,22, and 25 for supplying compressed air to the service-brake circuits and the high pressure air load circuit, sensors shown above elements 31 for monitoring pressure in the service brake circuits, and an electronic control unit 15 for evaluating electrical signals from the

Art Unit: 3657

sensors and for controlling the electrically actuatable valves, an electrically actuatable valve 25 associated with the high pressure compressed air load circuit being switchable by the electronic control unit between a closed position in de-energized normal state and an open position to establish communication with at least one of (i) the service brake circuits and (ii) at least one of the compressed air reservoirs thereof an the compressed air supply part, when compressed air is demanded of the high pressure compressed air load circuit as disclosed in col. 5 lines 1-2, col. 5 lines 9-18, and col. 5 lines 51-54.

Beck discloses being in a closed position in a de-energized state but is silent with regards to the electrically actuatable valves being in an open position in a de-energized normal state.

Crouch teaches in col. 9 lines 55-59 the use of electrically actuatable valves that are normally open in a de-energized state in place of valves that are normally open in a de-energized state.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the valves of Beck to have been normally open in a de-energized state, as taught by Crouch, in order to provide a means of supplying compressed air to the service brake circuits in a fail safe manner.

Re: claim 11. Beck, as modified, teaches in Beck in the figure the limitation wherein the electrically actuatable valves 21 and 22 and the electrically actuatable valve 25 associated with the high pressure compressed air load circuit are connected to a common compressed air distributor line 20 to which there is connected a compressed

Art Unit: 3657

air supply line shown in the area at the end of the lead line of number 16 in communication with the compressor.

4. Claims 2 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beck in view of Crouch as applied above, and further in view of US Patent 4911617 to Buma et al.

Re: claim 2. Beck, as modified, is silent with regards to the high pressure compressed air load circuit being an air-suspension circuit.

Buma et al. teach in figure 1 the use of a compressed air system wherein a high pressure compressed air load circuit 20 is an air-suspension circuit.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the high pressure compressed air load circuit of Beck, as modified, to have been an air suspension circuit, as taught by Buma et al., in order to provide a means of leveling a vehicle during its travel along a road.

Re: claim 12. Beck, as modified, teaches in Beck that the system further comprises a check valve 16 disposed in the compressed air supply line and describes the presence of an air dryer, but Beck does not state that the air dryer is disposed in the compressed air supply line.

Buma et al. teach in figure 1 a system comprising an air dryer 7 disposed in the compressed air supply line 2a.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the system of Beck, as modified, to have included the air dryer disposed in the compressed air supply line, as taught by Buma et al., in

Art Unit: 3657

order to provide a means of purifying and drying the air before it reaches the consuming circuits.

5. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beck in view of Crouch as applied above, and further in view o US Patent 4799707 to Buma et al.

Beck, as modified, is silent with regards to the system further comprising an electronic control device adapted to control the high pressure compressed air load circuit and to communicate with the electronic control unit via a data line.

Buma et al. teach in figure 1 a system comprising an electronic control device M9 adapted to control the high pressure compressed air load circuit and to communicate with an electronic control unit M8 via a data line shown between M8 and M9.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the system of Beck, as modified, to have further included an electronic control device adapted to control the high pressure compressed air load circuit and to communicate with the electronic control unit via a data line, as taught by Buma et al., in order to provide a means of decreasing the pressure at the delivery port of the compressor to reduce the amount of torque needed to start the compressor to satisfy an air demand request.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beck in view of Crouch as applied above, and further in view of US Patent 4616881 to Muller et al.

Re: claim 7. Beck, as modified, discloses in col. 4 lines 43-47 that each consumer circuit may include a reservoir then gives the example of circuits 2.1 and 2.2 having a reservoir, but is silent with regards to specifically the at least one secondary load circuit being without compressed air reservoirs.

Muller et al. teach in figure 1 the limitation wherein the compressed air load circuits have at least one secondary load circuit III and IV without compressed air reservoirs whereas circuits I and II have reservoirs 3 and 4, respectively.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the circuits of Beck, as modified, to have included at least one secondary load circuit without compressed air reservoirs, as taught by Muller et al., in order to provide a means of supplying compressed air without the need for superfluous components.

7. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beck in view of Crouch and US Patent 4616881 to Muller et al. as applied to claim 7 above, and further in view of US Patent 6149246 to Terborn et al.

Re: claim 8. Beck, as modified, discloses in Beck at least one secondary circuit 2.3 and 2.4 and Beck, as modified, discloses that element 2.4 is specifically a low pressure circuit, but is silent with regards to the at least one secondary circuit specifically having a lower pressure level than in the service brake circuits.

Terborn et al. teach in col. 3 lines 14-17 the use of one circuit having a pressure that is lower than another.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the at least one secondary circuit of Beck, as modified, to have had a lower pressure level than in the service brake circuits, in view of the teachings of Terbom et al., in order to provide a desired pressure level depending on desired application. For example, one may provide less pressure in the secondary circuit for the parking brake since it is used less frequently than the service brake and since the service brake can be utilized until the parking brake is sufficiently pressurized.

Re: claim 9. Beck, as modified, discloses that the high pressure compressed air load circuit 30 has a pressure level that is higher than in the secondary or low pressure load circuit 2.4 and suggests that the pressure level of the high pressure compressed air load circuit is higher than in the service brake circuits in col. 5 lines 51-54 where it is explained that air under pressure flows from circuit 30 to circuits 2.1 and 2.2, but is silent with regards to the pressure level between the high pressure compressed air load circuit and the other of the secondary load circuits (circuit 2.3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the at least one secondary circuit of Beck, as modified, to have had a lower pressure level than in the high pressure compressed air load circuit, in view of the teachings of Terbom et al., in order to provide a desired pressure level depending on desired application. For example, one may provide less pressure in the secondary circuit for the parking brake since it is used less frequently than the service brake and since the service brake can be utilized until the parking brake is sufficiently pressurized.

Re: claim 10. Beck, as modified, teach in Beck the limitation wherein the at least one secondary load circuit includes solenoid valves 23, 24 and further comprising a pressure limiting valve 16, which limits pressure from right to left of the valve, interposed upstream from the solenoid valves of the at least one secondary load circuits.

***Response to Arguments***

8. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 3657

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 571-272-7114. The examiner can normally be reached on Monday-Friday (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on 571-272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

mm  
November 18, 2009

/Melody M. Burch/  
Primary Examiner, Art Unit 3657